

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A light-emitting element which emits light itself, comprising:
a light-emitting portion having a higher refractive index than a refractive index of air; and
a diffraction grating structure provided to a light-emitting side surface of the light-emitting outermost surface side of the light-emitting portion,
wherein a minimum light-emission value is equal to or less than 50% of a maximum light-emission value when white light is emitted from said light-emitting portion,
wherein said diffraction grating structure has a pitch of a fine convex-concave structure being in a range of from 1 μm to 4 μm, and a depth of said fine convex-concave structure being in a range of from 0.4 μm to 4 μm.
wherein said light-emitting portion includes light-emitting materials for at least two primary colors which emit the white light among light-emitting materials for three primary colors, and
wherein a light emission ratio of the light-emitting materials for said at least two primary colors among the light-emitting materials for the three primary colors is adjusted to make the minimum light emission value equal to or less than 50% of the maximum light emission value when the white light is emitted from said light-emitting portion.
2. (original): The light-emitting element according to claim 1, further comprising:
a color-separation filter provided between said light-emitting portion and said light-emitting side surface,

wherein a minimum value of a spectral product obtained from a light-emission waveform of the white light emitted from said light-emitting portion and a spectral transmittance of said color-separation filter is equal to or less than 50% of a maximum value thereof, whereby the minimum light-emission value is equal to or less than 50% of the maximum light-emission value when the white light is emitted from said light-emitting portion.

3. (original): The light-emitting element according to claim 2, wherein a color-separation filter which has minimum transmittance of equal to or less than 50% of maximum transmittance is used for said color-separation filter.

4. (original): The light-emitting element according to claim 1, wherein said light-emitting portion includes light-emitting materials for at least two primary colors capable of emitting the white light among light-emitting materials for three primary colors.

5. (original): The light-emitting element according to claim 4, wherein a light-emission ratio of the light-emitting materials for said at least two primary colors among the light-emitting materials for the three primary colors is adjusted to make the minimum light-emission value equal to or less than 50% of the maximum light-emission value when the white light is emitted from said light-emitting portion.

6. (original): The light-emitting element according to claim 4, wherein said light-emitting portion includes the light-emitting materials for said three primary colors.

7. (original): The light-emitting element according to claim 4, wherein said light-emitting materials exhibit light emission by singlet exciton.

8. (original): The light-emitting element according to claim 2, wherein said light-emitting materials exhibit light emission by triplet exciton.

9. (canceled).

10. (original): The light-emitting element according to claim 9, wherein a ratio of said depth to said pitch in said fine convex-concave structure ranges from 0.25 to 0.60.

11. (previously presented): The light-emitting element according to claim 1, wherein said light-emitting portion includes light-emitting materials for at least two primary colors emitting the white light among light-emitting materials for three primary colors.

12. (previously presented): The light-emitting element according to claim 1, further comprising:

a color-separation filter provided between said light-emitting portion and said light-emitting side surface,

wherein a minimum value of a spectral product obtained from a light-emission waveform of the white light emitted from said light-emitting portion and a spectral transmittance of said color-separation filter is approximately 7% of a maximum value thereof.

13. (new): The light-emitting element according to claim 4, wherein the combination of said light-emitting portion and said color separation filter suppresses the transmitted light to extent in the wave range $\pm 25\text{nm}$ or more apart from the maximum light emission wavelength of said light-emitting materials.

14. (new): The light-emitting element according to claim 1, further comprising: a color-separation filter provided between said light-emitting portion and said light-emitting side surface, wherein a minimum value of a spectral product obtained from a light-emission waveform of the white light emitted from said light-emitting portion and a spectral transmittance of said color-separation filter is approximately 2% of a maximum value thereof.

15. (new): The light-emitting element according to claim 1, wherein said light-emitting portion comprising: a glass substrate, a transparent electrode formed on one side of said glass substrate,

a light-emitting layer formed on said transparent electrode and a rear electrode formed on said light-emitting layer,

wherein said diffraction grating structure is formed on the other side of said glass substrate that is said light-emitting outermost surface said of said light-emitting portion.

16. (new): The light-emitting element according to claim 15, further comprising a color-separation filter formed between said glass substrate and said diffraction grating structure.

17. (new): The light-emitting element according to claim 15, wherein said diffraction grating structure is obtained by providing the fine convex-concave structure to the surface of said the other side of said glass substrate.

18. (new): The light-emitting element according to claim 15, wherein said diffraction grating structure is formed by bonding an optical film separately manufactured as a transmission type optical film that has the fine convex-concave structure to said the other surface of said glass substrate.

19. (new): The light-emitting element according to claim 2, wherein said diffraction grating structure is obtained by providing the fine convex-concave structure to the outer surface of said color-separation filter.

20. (new): The light-emitting element according to claim 2, wherein said diffraction grating structure is formed by bonding an optical film separately manufactured as a transmission type optical film that has the fine convex-concave structure to the outer surface of said color-separation filter.

21. (new): The light-emitting element according to claim 2, wherein said color-separation filter is formed to have a single layer structure.
22. (new): The light-emitting element according to claim 2, wherein said color-separation filter is formed to have a multi-layer structure.